

ELECTRONICALLY FILED - 2021 July 21 4:36 PM - SCPSC - Docket # 2021-90-E - Page 1 of 8

Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's 2021 Avoided Cost Proceeding Pursuant to S.C. Code Ann. Section 58-41-20(A)

**JULY 21, 2021**

1 **Q. Please state your name, your position and your business address.**

2 **A.** My name is Matthew Stanley. I am employed by Pelzer Hydro Company, LLC (“Pelzer”)  
3 and Aquenergy Systems, LLC (“Aquenergy”), as Vice President and General Manager. I  
4 am also the designated environmental steward for both Pelzer and Aquenergy. The  
5 hydroelectric facilities owned and operated by Pelzer and Aquenergy are located in South  
6 Carolina. However, as previously stated in testimony, my business address is at the  
7 companies’ offices at 670 N. Commercial Street Suite 204, Manchester, NH 03101.

8 **Q. Are you the same Matthew Stanley that offered pre-filed testimony on direct in this**  
9 **matter?**

10 **A.** I am.

11 **Q. What is the purpose of the testimony you are now giving here?**

12 **A.** The purpose of this testimony is to respond to the rebuttal testimony of Duke Energy  
13 Carolinas, LLC’s and Duke Energy Progress, LLC’s (collectively, “Duke”) witnesses  
14 Snider and Johnson.

15 **Q. For background, can you briefly summarize your previous direct testimony**  
16 **concerning Duke’s proposed avoided costs, including the impact to Pelzer and**  
17 **Aquenergy?**

18 **A.** In sum, current avoided cost rates, which are materially similar to those being proposed in  
19 the current Duke proceedings, make break-even operation of small hydro facilities in South  
20 Carolina, like those at issue here, impossible. While Duke formerly provide an avoided  
21 cost rate which historically allowed for small hydro facilities to at least break-even and  
22 properly maintain their facilities if conservatively managed, continuously lower avoided

1 cost rates, like those proposed here, completely undermine the ability of small hydro QFs  
2 to operate. The continuous erosion of avoided costs rates is unjustified, both as a business  
3 and legal matter, based on the costs and benefits of small hydro.

4 As to hydropower's attributes, it provides clean, reliable, resilient and flexible generation  
5 which has unique value. This is especially true as the power sector transforms to  
6 accommodate decarbonization goals. Generation from run-of-river hydro is overall a stable  
7 and predictable source of power from hour-to-hour and day-to-day. This is because unlike  
8 other renewable generation sources, hydropower is seasonal and not intermittent.  
9 Hydropower also provides ancillary services to the grid important to integrating growing  
10 amounts of wind and solar generation, as these generation sources displace dispatchable  
11 fossil fuel generation. Overall, hydropower from facilities like those of Pelzer and  
12 Aquenergy provide the following: increased reliability; an emergency supply of power; an  
13 offset to investments in generation and/or transmission facilities that would otherwise be  
14 recovered through rates; local ancillary services, including reactive power; improved  
15 power quality; reduced land-use effects and rights-of-way acquisition costs; and reduced  
16 security and infrastructure risks. Without QF hydro like those projects discussed here,  
17 many of these services will be lost. Utilities like Duke would then have to re-procure these  
18 same services elsewhere at potentially greater cost.

19 As provided under Act 62, the services provided by and costs associated with running  
20 small hydro facilities must be properly accounted for in determining appropriate rates in  
21 this proceeding. The significant losses sustained by small hydro projects like those of

1 Pelzer and Aquenergy show that the proposed rates do not properly reflect the full costs or  
2 benefits of this resource type.

3 **Q. Did Duke's Rebuttal Testimony respond to your testimony on direct regarding**  
4 **avoided costs?**

5 **A.** Only in part. In summary, Duke witnesses offered testimony in rebuttal generally relating  
6 to (1) PPA term length, (2) the law related to determining avoided cost, (3) the benefits of  
7 hydropower, and (4) the costs of operating small hydro power. However, as to each of these  
8 areas, the Duke responses did not address the relevant points made by Pelzer and  
9 Aquenergy, or fellow intervenor Northbrook Carolinas Hydro, LLC ("Northbrook")  
10 (collectively, the "Hydro Intervenors").

11 **Q. Please respond to the testimony of Duke related to PPA term length.**

12 **A.** The testimony of Mr. Johnson and Mr. Snider both suggest that, to some extent, the matter  
13 of rates and long-term planning are matters which can be remedied by the Hydro  
14 Intervenors simply entering into longer-term PPAs. As I understand their point, because a  
15 lengthier agreement might provide a modestly higher payment (Duke estimates an  
16 approximately 20% difference), then according to Duke's testimony, the Hydro Intervenors  
17 are not claiming the full revenue offered by the utility.

18 However, the response of Duke presents only the illusion of choice. As stated in my  
19 previous testimony, small hydro QFs in South Carolina are operating at an approximately  
20 50% loss. Thus, a 20% increase falls significantly short of the approximately 100%  
21 increase that would be required just to meet operating costs. Making matters even worse,  
22 to obtain that modest increase, the Hydro Intervenors would actually have to lock

1 themselves into those flat, inappropriately low rates for up to 10 years. Rather than  
2 improving matters, a long-term agreement at such low rates would actually lock-in  
3 shortfalls for years to come and exacerbate all of the problems presented in my previous  
4 testimony.

5 Accordingly, the Hydro Intervenors have opted for the only path that remotely makes sense  
6 under these difficult circumstances: enter into a short-term agreement and try to persuade  
7 either Duke or the Commission of the need to implement more appropriate rates based on  
8 business conditions and/or the law.

9 **Q. Please respond to the Duke testimony regarding the law concerning avoided cost**  
10 **determination.**

11 **A.** As I understand the testimony of Duke, especially Mr. Snider, the utility believes that  
12 granting the Hydro Intervenors relief here would violate the law, i.e., that Public Utility  
13 Regulatory Policies Act of 1978 (“PURPA”) and the South Carolina Energy Freedom Act  
14 of 2019 (“Act 62”).

15 In responding, I want to make clear that I do not presume to be a lawyer. Moreover, it is  
16 my understanding that the Commission will be the ultimate interpreter of how PURPA,  
17 Act 62, or other law may apply in this proceeding. For those reasons, I will avoid making  
18 a similar legal argument to the one Mr. Snider offers. Rather, I will simply point out that  
19 in stating his legal point, Mr. Snider does not discuss all portions of Act 62 which may  
20 relate to the issues presented by the Hydro Intervenors. For instance, Act 62 contains  
21 language which, on its face, expresses that the Commission may account for differences in  
22 avoided costs based on geographic location and, notably, resource type of small power

1 producer's facilities. S.C. Code 58-41-20(B). As explained in my previous testimony, there  
2 are clearly differences in both the services provided and costs attributable to the operation  
3 and maintenance of small hydro facilities. These differences should hold true regardless of  
4 whether the facility is operated by the Hydro Intervenors or a utility such as Duke. In this  
5 proceeding, the Hydro Intervenors have presented these meaningful differences and the  
6 resulting negative impacts they are facing. In light of the ongoing position taken by Duke,  
7 our request is that the Commission not approve the avoided cost rates as proposed, as they  
8 do not account for the different costs and services related to hydro facilities as compared  
9 to other resources.

10 **Q. Please respond to the Duke testimony regarding the benefits of hydropower.**

11 **A.** As I understand the testimony of Duke, especially Mr. Snider, the utility downplays the  
12 value of certain benefits of small hydro generators. From knowledge and experience, there  
13 is broad industry consensus that hydroelectric power provides unparalleled reliability  
14 services for customers, utilities, and grid operators alike, all while being emissions-free  
15 and renewable. Benefits include:

- 16 • Continuous carbon-free energy
- 17 • Regulation and frequency response
- 18 • Spinning and non-spinning reserves
- 19 • Flexible capacity
- 20 • Inertia (energy stored in rotating generators)
- 21 • Long-Term Storage
- 22 • Black Start

1 Hydropower also needs no “ramp-up” time, as many combustion technologies do.  
2 Hydropower can increase or decrease the amount of power it supplies almost instantly to  
3 meet shifting demand. Thus, unlike other resources, hydropower can serve as both baseload  
4 and a peak power source.

5 These and other benefits of hydropower, resulting from the continuous conversion of  
6 water’s kinetic energy into electricity, are essentially universal to this resource and  
7 unchanging given the basic physical properties of run-of-river hydro. Duke’s testimony  
8 unfairly downplays the unique combination of these and other benefits which routinely  
9 flow from hydropower.

10 **Q. Last, you previously testified that Duke’s own similarly sized hydro facilities must**  
11 **also be operating under cost pressures similar to that of Pelzer and Aquenergy**  
12 **facilities. Please respond to the Duke testimony regarding that point.**

13 **A.** Duke does not directly respond to this point and instead dismisses it as irrelevant. Notably,  
14 Duke does not dispute the factual proposition I previously raised in my testimony – that  
15 the Hydro Intervenors’ losses strongly indicate that the utility itself cannot operate its own  
16 small hydro facilities in South Carolina at the proposed avoided cost rates. The difference  
17 is that while Duke might be able to recover those losses from ratepayers, the Hydro  
18 Intervenors cannot and almost exclusively depend on the avoided cost rate for recovery.  
19 Accordingly, it is likely that Duke’s small hydro facilities are operating at an unfair  
20 advantage when compared to the same resource-type operated by the Hydro Intervenors.  
21 The costs of operating the same resource-type should be similarly recoverable, regardless

1 of whether Duke or the Hydro Intervenors initially bear the costs. In sum, like resources  
2 should be treated in like ways, and Act 62 provides for that precise outcome.

3 **Q. Does this conclude your testimony?**

4 **A.** Yes, and I will close by briefly recalling what is at stake for small hydro operators in this  
5 matter. Bottom-line is that the viability of privately owned hydropower in this state is  
6 at issue. As previously discussed, the Hydro Intervenors' South Carolina facilities are  
7 operating at substantial losses that are plainly unsustainable. Failure to acknowledge these  
8 costs and benefits will result in currently operating renewable assets being lost in this state  
9 and lost to local communities. That is unnecessary and inconsistent with this state's public  
10 policy.

11 Thank you for the opportunity to provide this surrebutal testimony.

12 **Q. Will you update your testimony based on information that becomes available?**

13 **A.** Yes. Pelzer and Aquenergy reserve the right to revise and add to their testimony via  
14 supplemental or amended testimony, especially if new information becomes available or  
15 known.